UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/036,356	01/07/2002	Pascal Agin	Q-67999	5474

7590 11/21/2003

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, N.W.
Washington, DC 20037-3213

EXAMINER	
GELIN, JEAN ALLAND	

ART UNIT	PAPER NUMBER
2681	2

DATE MAILED: 11/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/036,356	AGIN ET AL.	
	Examiner	Art Unit	
	Jean A Gelin	2681	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *17-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *17-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *1*.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 17-21, 23-27, 29, 31, 32, 34, 37, 41, 43-50 are rejected under 35 U.S.C. 102(b) as being anticipated by Tiedemann Jr. et. (US 6,137,840).

Regarding to claims 17, 18, 26, 27, 29, 31, 32, 34, and 50, Tiedemann Jr. teaches a method for improving performances of a mobile radio communication system using a power control algorithm (col. 3, lines 13-17), the method comprising, upon the occurrence of a significant change in the required transmit power (col. 3, lines 20-26), performing the step of changing the transmit power according to a corresponding change in the required transmission quality target value (i.e., transmitting at higher power or lower power due to propagation path, col. 3, lines 27-38 and col. 4, lines 1-28), power control algorithm is an inherent feature of in CDMA system.

Regarding to claim 19, Tiedemann Jr. teaches the significant change in the required transmit power includes a change in transmission rate (col. 3, lines 35-37).

Regarding to claim 20, Tiedemann Jr. teaches the transmission quality target value has a predetermined value (col. 15, lines 11-37).

Regarding to claim 21, 43, Tiedemann Jr. teaches the predetermined value is regularly updated (col. 15, lines 46-57).

Regarding claim 23, Tiedemann Jr. teaches the communication system is CDMA type (col. 3, lines 27-30).

Regarding claim 24, Tiedemann Jr. teaches the power control is performed in the uplink transmission direction of the mobile radiocommunication system (col. 4, lines 7-11).

Regarding claim 25, Tiedemann Jr. teaches the power control is performed in the downlink transmission direction of the mobile radiocommunication system (col. 3, lines 43-65).

Regarding claim 37, Tiedemann Jr. teaches a mobile radiocommunication network entity comprising means for communicating the change in the required transmission quality target value to mobile stations (col. 3, lines 30-65).

Regarding claim 41, Tiedemann Jr. teaches means for communicating said corresponding change in the required transmission quality target value, to a mobile radio communication network entity (col. 5, line 45 to col. 6, line 24).

Regarding claims 44-46, Tiedemann Jr. teaches the radiocommunication system, including at least one mobile station (col. 5, lines 45-64).

Regarding claims 47-49, Tiedemann Jr. teaches the radiocommunication system, including at least one mobile radiocommunication network entity (col. 5, lines 18-44).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tiedemann Jr. et. (US 6,137,840) in view of Faber (US 6,405,052).

Regarding claim 22, Tiedemann Jr. teaches all the limitations above except the transmission quality is represented by a signal to interference.

However, the preceding limitation is known in the art of communications. Faber teaches determining a signal-to-interference ratio and a maximum power transmission level respectively as a predetermined first and second threshold and the condition to increment the transmission power is based on signal-to-interference ratio in closed loop power control (col. 5, lines 1-17 and col. 6, lines 3-15). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention to implement the technique of Faber within the system of Tiedemann in order to avoid transmission power overshoot and increased interference at the beginning of the call acquisition between the mobile station and the base station due to the introduction of closed loop power control method (col. 6, lines 27-37).

Double Patenting

5. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

6. Claims 17-50 are rejected under the judicially created doctrine of double patenting over claims 1-26 of U. S. Patent No. 6,337,973 and over claims 1, 2, 7-13, and 22-24 of U. S. Patent No. 6,549,785 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: a method for improving performances of a mobile radio communication system using a (closed loop) power control algorithm, the method comprising, upon the occurrence of a significant change in the required transmit power, performing the step of changing the transmit power according to a corresponding change in the required transmission quality target value

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Allowable Subject Matter

7. Claims 28, 30, 33, 35, 36, 38-40, and 42 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form

including all of the limitations of the base claim and any intervening claims, and overcome the double patent rejection by filing a terminal disclaimer.

8. The following is a statement of reasons for the indication of allowable subject matter: the prior art teaches a method of improving performances of a mobile radio communication system using power control algorithm.

On the other hand, the Applicant teaches wherein said means for performing one step of changing the transmit power include a look-up table, containing predetermined values of corresponding changes in the required transmission quality target value, corresponding to different significant changes in the required transmit power. This limitation, in conjunction with all limitations of the independent and dependent claims, has not been disclosed, taught, or made obvious over the prior art of record.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chheda et al., U.S. Patent No. 6,181,738, discloses improving the reverse link capacity by adjusting the power as a function of the frame quality metric.

Dahlman et al., U.S. Patent No. 6,173,162, discloses controlling the transmit power by using a fast power control loop which monitors a reference channel and adjusts the transmit power in accordance with an SIR target value and a plurality of slow power control loop to adjust the SIR target values and provide offset transmit values

associated with each physical channel to adapt the transmit power in accordance with varying quality requirements between radio bearers.

Honkasalo, U.S. Patent No. 6,137,789, discloses a mobile station that is able to determine a required data rate based on data buffer usage.

Kotzin et al., U.S. Patent No. 6,018,544, discloses commanding subscribers to control their power levels such that different predetermined targets (received power, frame erasure rate, bit error rate and signal quality) for the subscribers are maintained.

Häkkinen., U.S. Patent No. 5,839,056, discloses controlling the transmission power of a radio transmitter as a function of a reference SIR and a reference power level.

Reed et al., U.S. Patent No. 5,574,984, discloses controlling the transmission power level as a function of a target quality level and fading characteristics.

Kanai , U.S. Patent No. 5,386,589, discloses controlling the transmission power level as a function of the bit error rate.

Chen U.S. Patent No. 5,982,760, teaches method and apparatus for power adaptation control in closed-loop communications.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A Gelin whose telephone number is (703) 305-4847. The examiner can normally be reached on 9:00 AM to 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on (703) 305-4040. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4847.

JEAN GELIN
PATENT EXAMINER

J.Gelin
November 14, 2003